

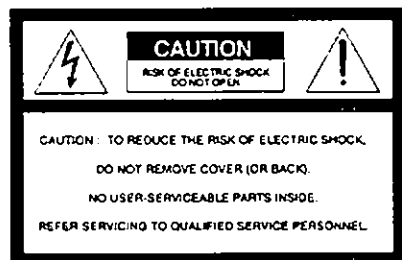
Cordless Stereo Headphones System

Operating Instructions

VIP-1000

Warning

To prevent fire or shock hazard, do not expose the unit to rain or moisture.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

These graphical symbols are on the bottom of the enclosure.

Information for the user

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

- Operate the transmitter only with the supplied AC power adaptor.
- Operate the DSP unit only on 120 V AC, 60 Hz.
- Do not open the cabinet. Refer servicing to qualified personnel only.
- Should any solid object or liquid fall into the unit, unplug the unit and have it checked by qualified personnel before operating it further.
- Unplug the AC power adaptor and the DSP unit from the wall outlet when they are not to be used for an extended period of time. To disconnect them, pull them out by grasping the plug. Never pull them by the cord.
- Do not use alcohol, benzene, or thinner to clean the unit.
- Do not leave the unit in a location near heat sources such as radiators or airducts, or in places subject to direct sunlight, excessive dust, mechanical vibration or shock, or unstable place.
- To prevent internal heat build-up, do not block the ventilation openings.

Note on headphones

Preventing hearing damage

Avoid using headphones at a high sound volume. Hearing experts advise against continuous, loud and extended playing. If you experience a ringing in your ears, reduce the volume or discontinue use.

If you have any questions or problems concerning the unit that are not covered in this manual, please consult the nearest Sony dealer.

Be sure to bring the headphones, the DSP unit and the transmitter to the Sony dealer when requiring repair work.

Owner's Record

The model and serial numbers are located at the bottom of the DSP unit. Record the serial number in the space provided below. Refer to it whenever you call upon your Sony dealer regarding this product.

Model No. VIP-1000

Serial No. _____

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Welcome!

Thank you for purchasing the Sony cordless stereo headphone system. This headphone system is designed to make your A/V life more enjoyable. With your new headphone system, you can enjoy clear and realistic theater-like sounds from the headphones while in the comfort of your own home.

Before operating this headphone system, please read this manual thoroughly and retain it for future reference.

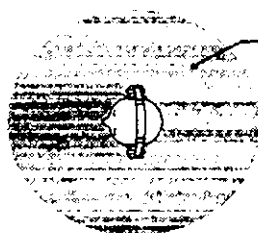
What is the VIP-1000 cordless stereo headphone system?

The VIP-1000 is a new type of headphone system which has a spatial sound field effect function. Once you activate this function, the DSP (Digital Signal Processor) unit remembers the sound front position (sound direction) and automatically adjusts the headphones to compensate for the shifting sound position whenever you turn your head. With this function, you can experience sound movement that is linked to the picture movement. The result is improved clarity of words and music fixed to the scene as if you are listening to the sound from stereo speakers. The DSP gives you clear and realistic sound and allows you to select the DSP mode and different levels of acoustic reverberation without loss of sound quality.

This new type of headphone system has the following features.

- Out of head sound image for accurate reproduction of the sound field
The DSP unit recognizes a full 360 degree sound field and enables you to hear an accurate indoor sound field simulation. You can enjoy this effect for any sound.

Sound field of the new headphone system



The VIP-1000
headphone
system's
sound field

Sound field of current headphone systems



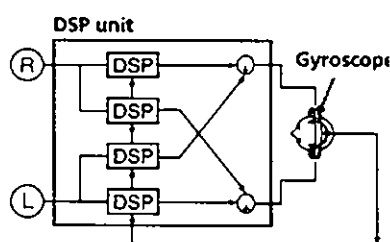
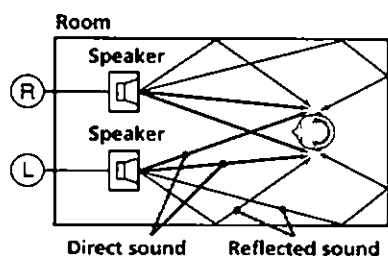
Conventional
headphone
sound field

- **Direction compensation**

A gyroscope built into the headphones can detect your head angle and compensate the sound transfer characteristic from the source to your ears. You can experience the natural sound field and quality as if you were listening from stereo speakers.

Ordinary stereo sound field (with speakers)

New sound field (with the VIP-1000)

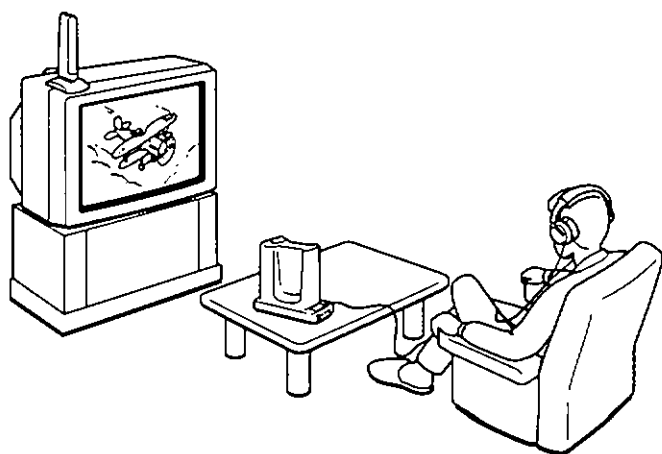


- **Fully open headphones**

Since these comfortably fitting, fully open headphones do not completely cover your ears, they reduce the discomfort from ear pressure and tiredness from prolonged listening. These headphones are designed to effectively reproduce the natural sound field effect.

Configuration of the headphone system

The headphone system consists of a DSP unit, the headphones, and a transmitter. With the transmitter, you are free from the restriction of an audio cable when listening to a program. You can use this system with any audio/video equipment with line output jacks.



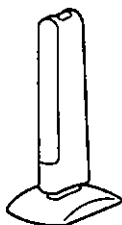
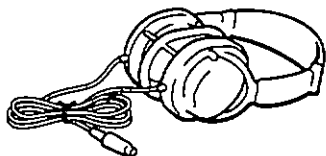
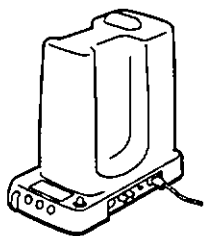
Unpacking

Check that you have the following items:

• DSP unit

• Headphones

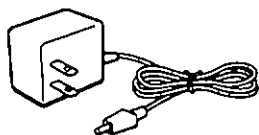
• Transmitter



• AC power adaptor

• Audio cable (1.5 m)
(phono plugs ↔
phono plugs)

• Ear pads

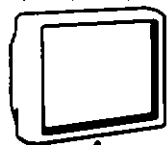


Connections

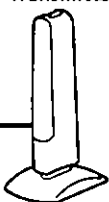
Overview

Set up the headphone system as follows:

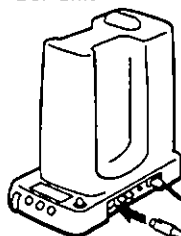
TV, VCR, MDP, etc.



Transmitter



DSP unit



Headphones

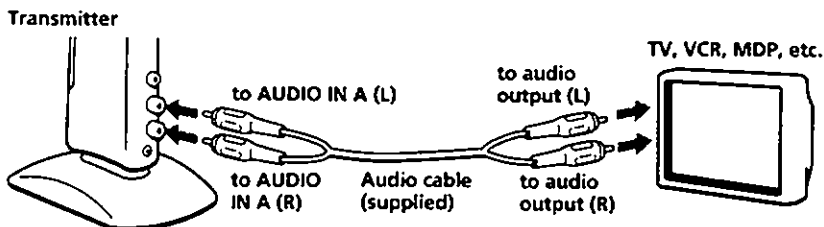


For details of each connection, see the following pages.

Connecting to audio/video equipment

Connecting the transmitter to the audio/video equipment

When you use the supplied audio cable, connect the AUDIO IN A jacks to the LINE OUT or REC OUT jacks of the source equipment.



Note

Do not use A and B terminals at the same time. If you do so, the audio signals may be mixed.

Optional connecting cords

For connecting the LINE OUT or REC OUT jacks to the AUDIO IN B jack, or for connecting the headphone jack to the AUDIO IN A jacks:

RK-G129KS (stereo mini plug ↔ phono plug × 2).

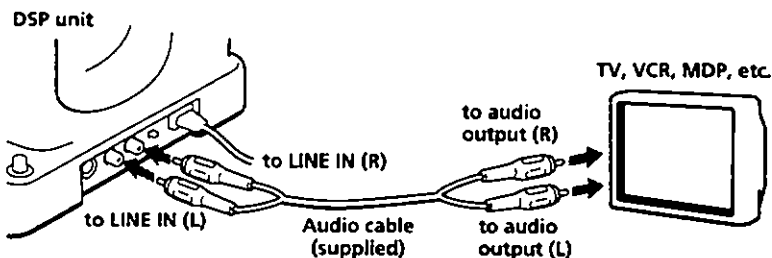
For connecting the headphone jack to the AUDIO IN B jack:

RK-G136KS (stereo mini plug ↔ stereo mini plug).

If you want to connect the DSP unit directly to the audio/video equipment

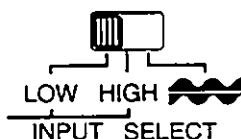
Connect the DSP unit directly to the audio/video equipment in the following cases. (The transmitter will not be used.)


- When you want to enjoy better quality sound
- When you want to use the headphone system beyond the infrared effective area (see "Effective area of the infrared rays" on the next page)
- When there are any obstacles between the transmitter and the connected audio/video equipment



Setting the input level

When you connect the DSP unit directly to the audio/video equipment, you must set the INPUT SELECT switch to the appropriate position depending on the output level of the connected equipment. Make sure to change the setting to prevent sound distortion and to protect your ears.



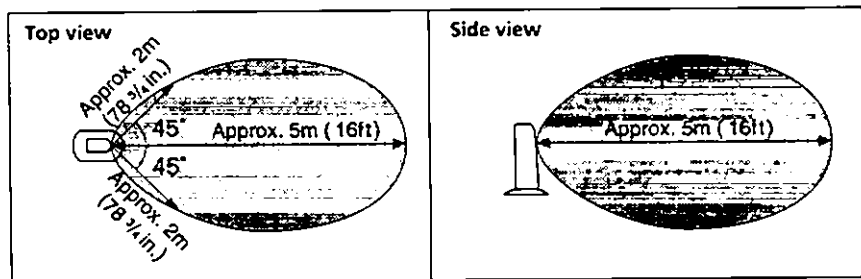
Position	Connected equipment
LOW	TV, VCR, MDP (when the output is analog sound)
HIGH	MDP (when the output is digital sound)
	Supplied transmitter

Notes

- If nothing is connected to the LINE IN jacks of the DSP unit, the DSP unit will automatically input the signal from the transmitter.
- Turn down the volume whenever you change the input setting.

Effective area of the infrared rays

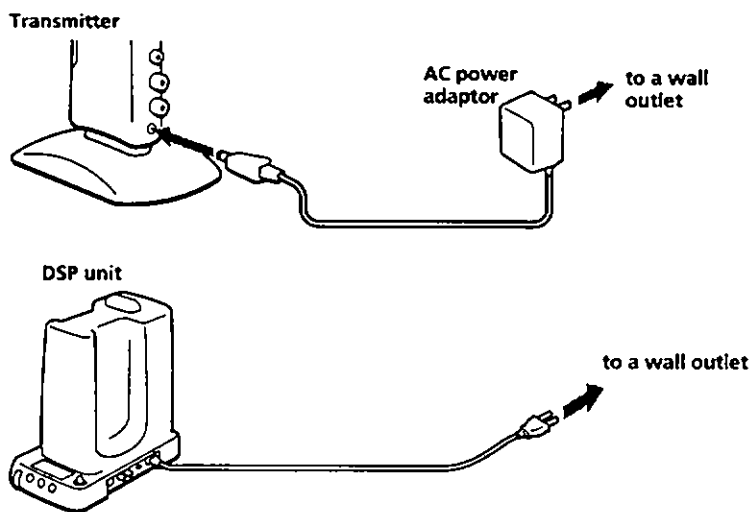
The diagrams illustrate the approximate area covered by the infrared rays emitted from the transmitter. Position the transmitter so that your listening area is within the effective area of the transmitter.



Notes

- The infrared rays will not penetrate walls or opaque glass; therefore, the DSP unit must be used within the "in sight" area of the transmitter.
- As long as you use the DSP unit inside the area the diagrams above illustrate, the transmitter can be placed in the front, behind or by the side of the listener.
- The brightness of the infrared emitters may not be equal. However, this is not a malfunction and does not affect the effective areas of the transmitter.

Connecting to a wall outlet



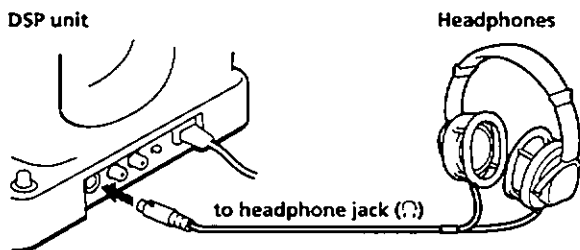
Note

Use only the supplied AC power adaptor for the transmitter. Do not use any other AC power adaptor, or it may cause a malfunction of the unit.



Polarity of the plug

Connecting the headphones to the DSP unit

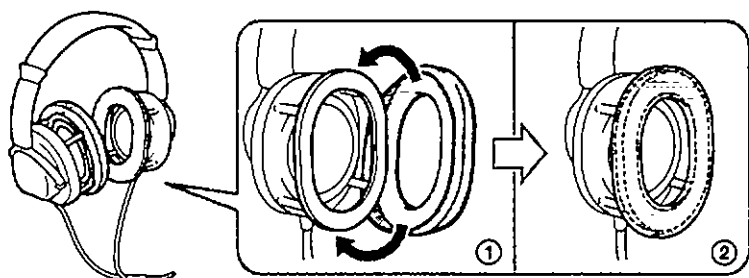


Note

To disconnect the headphones, pull the headphone cord out by grasping the plug. Never pull it by the cord.

Attaching ear pads

If the fit of the headphones is not comfortable around your ears, attach the supplied ear pads as shown below.

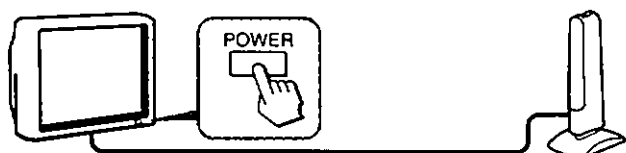


Note

The ear pad's lip should cover the headphone ring entirely without gaps so that it will remain on the headphone without slipping off when you wear the headphones

Listening to a program

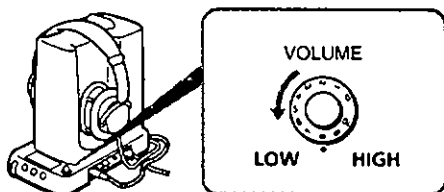
- 1 Turn on the audio/video equipment connected to the transmitter. When the audio signal is supplied, the transmitter turns on automatically, and the infrared emitter lights glow. If the transmitter is connected to the headphone jack of the source equipment, set the volume control of that equipment as high as possible without the audio signal getting distorted.



Note


Make sure you set INPUT SELECT on the DSP unit to the appropriate position.

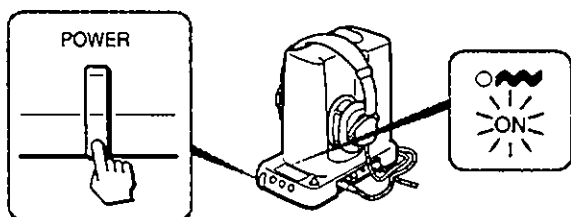
- 2 Turn the volume of the DSP unit to the minimum level.



- 3 Put the headphones on the top of the DSP unit, then press POWER on the DSP unit.

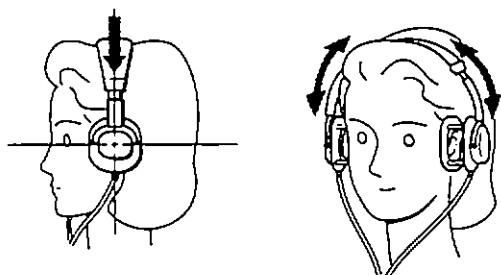
Do not move the headphones from the DSP unit while "ON" is blinking.

"ON" blinks in the display window for a few seconds, and the  indicator lights up indicating that it is receiving the signal from the transmitter.



(continued)

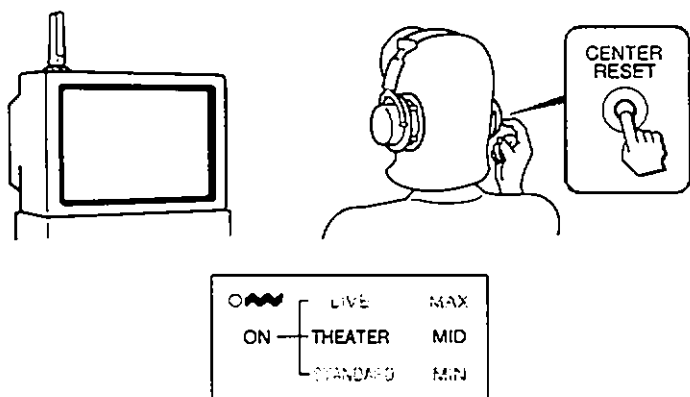
- Put on the headphones vertically, and adjust the slider band. Make sure that the headphones are correctly oriented: i.e., the left headphone is on the left ear.



Note

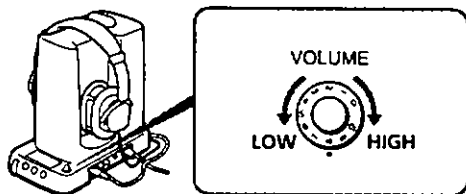
When you take off the headphones, handle them carefully with both hands, not with one hand.

- Turn your head to your desired sound front position (e.g., in front of the TV), then press CENTER RESET on the right headphone. You can now select the DSP mode and reverberation levels of your choice. The selected mode and level will appear in the display window. For details of the DSP mode and reverberation levels, see "Selecting the sound field effect" on page 13.



After you press CENTER RESET, you will hear the sound coming from the specified sound front position whenever you turn your head. It is just like listening to the sound from stereo speakers, not from the headphones.

- Adjust the volume by using **VOLUME** on the DSP unit.



Notes on the transmitter and DSP unit

- Be sure to remain in the effective range of the infrared rays while listening (see "Effective area of the infrared rays" on page 8).
- Do not cover the infrared sensor with your hands.
- If you use the infrared sensor on the DSP unit under a strong light, such as direct sunlight, sound may be intermittent.

Notes on the headphones

- While you are using the headphones, a change of sound direction may occur between the headphones and the audio/video equipment. If this happens, face the audio/video equipment (e.g. face the front of the TV), and press **CENTER RESET** again.
- Do not use the headphones under the direct sunlight.
- Remember not to disturb those close to you with sounds coming from your headphones.
- Keep the volume at a moderate level. This will allow you to hear outside sounds and protect your ears.
- If the headphones are used at a high volume, outside sounds may become inaudible. Avoid listening to the unit in situations where hearing must not be impaired.

After using the headphones

When you are finished using the headphones, be sure to turn off the DSP unit first, then turn off the connected equipment to the transmitter. Otherwise, you may hear some noise when the infrared rays are suddenly cut off. However, this is not a sign of malfunction.

When no audio signal is received by the DSP unit for more than approximately three minutes

The transmitter will be turned off automatically when over three minutes have passed without the DSP unit receiving an audio signal.

When the audio signal is interrupted or when extremely low sound continues for more than approximately three minutes

The transmitter may turn itself off in instances when the audio signal coming from the audio/video equipment is interrupted or when the signal or sound level is very low for at least three minutes. If the transmitter is connected to the headphone jack of the source equipment, increase the volume of that equipment and lower the volume of the DSP unit.

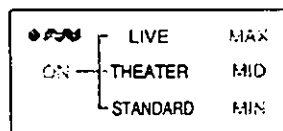
Selecting the sound field effect

The VIP-1000 reproduces reflected and reverberated sound using its digital signal processor. This unit incorporates three types of DSP (Digital Signal Processor) modes: LIVE, THEATER, and STANDARD. You can enjoy these modes at your pleasure and adjust the reverberation of each DSP mode to suit your taste.

Turn on EFFECT to make the DSP and reverberation functions work.

Selecting the DSP mode

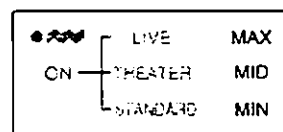
Press DSP to select the DSP mode.



DSP mode	Sound effect
LIVE	Reproduces the reflection characteristics of a large concert hall
THEATER	Reproduces the reflection characteristics of a movie theater
STANDARD	Reproduces the reflection characteristics of a standard house room

Adjusting the reverberation

Press REVERB.



Reverberation level	Adjustment
MAX	To select the maximum level of reverberation
MID	To select the middle level of reverberation
MIN	To select the minimum level of reverberation

To turn off the sound field effect

Press EFFECT to turn off the sound field effect. "OFF" will appear in the display window, and other indicators will disappear. The sound from the headphones will become ordinary headphone sound.

Troubleshooting

After trying the remedies below, if the problem is not corrected, contact your nearest Sony dealer.

Problem	Adjustment
No sound	<ul style="list-style-type: none"> • Turn on the DSP unit. • Check the connection of the audio/video equipment or the AC power adaptor. • Check that the audio/video equipment is turned on. • If the DSP unit is directly connected to the audio/video equipment, check that the input level setting is correct. • Check that the power cord is connected securely. • Adjust the volume of the DSP unit to an appropriate level. • Use the headphones nearer to the transmitter or remove any obstructions. The mute function will activate, and you will not hear any sound from the headphones if a hissing noise increases when the infrared rays are obstructed, or if you use the set of headphones outside of the effective range. (See "Effective area of the infrared rays" on page 8.) • If the transmitter is connected to the headphone jack, turn up the volume of the connected audio/video equipment.
Distortion	<ul style="list-style-type: none"> • Set the INPUT SELECT switch on the DSP unit to the appropriate position depending on the output level of the connected equipment. • If the transmitter is connected to the variable output jacks of the audio/video equipment, turn down the volume of the connected audio/video equipment.
Loud background noise	<ul style="list-style-type: none"> • Use the headphones and DSP unit near the transmitter. • Check to determine if there are any objects between the transmitter and the DSP unit. • Check to ensure that the infrared sensor on the DSP unit is not covered with your hands. • Change the position or angle of the transmitter. • Set the INPUT SELECT switch on the DSP unit to the appropriate position depending on the output level of the connected equipment. • If the transmitter is connected to the variable output jacks of the audio/video equipment, turn down the volume of the connected audio/video equipment. • If the transmitter is connected to the headphone jack, turn up the volume of the connected audio/video equipment.

Specifications

Transmitter (TMR-IF310)

Modulation system

Frequency modulation

Carrier frequency

Right 2.8 MHz

Left 2.3 MHz

Effective range

Up to approx. 5 m (16 ft.)

Dimensions (W/H/D)

Approx. 70 × 207 × 123 mm

(2 7/8 × 8 1/4 × 4 7/8 in.)

Mass

Approx. 110 g (3.9 oz.)

DSP unit (VIP-1000)

Frequency response

20-20,000 Hz

(LINE INPUT, EFFECT OFF)

Distortion

Less than 1% at 1 kHz

(LINE INPUT, EFFECT OFF)

Power source

120 V AC, 60 Hz

Audio input

Line input High: 2 Vrms
 100% modulation
 Low: 0.5 Vrms
 100% modulation

Dimensions (W/H/D)

Approx. 145.4 × 274 × 261.9 mm

(5 3/4 × 10 7/8 × 10 3/8 in.)

Mass

Approx. 2.5 kg (5 lb 9 oz.)

Headphones (VIP-1000H)

Mass

Approx. 340 g (12 oz.)

Supplied accessories

AC power adaptor AC-96N (1)

Audio cable (1)

Ear pads (2)

Design and specifications are subject to change without notice.

The infrared sensor of the VIP-1000 uses DNR™ (Dynamic Noise Reduction system).

"DNR is a trademark of National Semiconductor Corporation."